

This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) A composite material consisting essentially of comprising a first set and a second set of particles, each of a ~~a~~ plurality of cores ~~of~~ polycrystalline ultra-hard material dispersed in a matrix, the matrix consisting essentially of a further polycrystalline ultra-hard material of a grade or type which is different from that of the material of the cores, wherein the first and second sets of particles are contiguous throughout the composite material, and the particle size and/or composition of the first set of particles is different than the particle size and/or composition of the second set of particles.
2. (Currently Amended) A composite material according to claim 1, wherein each said polycrystalline ultra-hard material is selected from the group of materials consisting of polycrystalline diamond (PCD) or polycrystalline cubic boron nitride (PeBN) one of the first or second set of particles comprises polycrystalline diamond while another of the first or second set of particles comprises polycrystalline cubic boron nitride.
3. (Cancelled)
4. (Currently Amended) A composite material according to claim 1, wherein the cores are made from a fine-grained PCD grade material and the matrix of a coarser PCD grade material than that of the cores one of the first or second set of particles has a finer particle size than another of the first or second set of particles.
5. (Currently Amended) A composite material according to claim 1, wherein the cores are made from a coarser PCD grade material and the matrix of a fine-grained PCD grade material one of the first or second set of particles has a composition different than another of the first or second set of particles.

6. (Currently Amended) A composite material according to claim 4, wherein the fine-grained PCD grade material has grains having a grain finer particles have a size in the range of about 0.1 to about 20 microns.

7. (Currently Amended) A composite material according to claim 4, wherein the coarser PCD grade material has grains having a grain particles have a size in the range of about 10 to about 100 microns.

8. (Currently Amended) A composite material according to claim 1, wherein the cores and matrix ~~are made from first and second set of particles are made of~~ the same type of said polycrystalline ultrahard material, and the particle size of the material of said cores differs from that of the material of said matrix by ~~between~~ first set of particles differs from that of the second set of particles by about 5 [[and]] to about 70 microns.

9. (Cancelled)

10. (Currently Amended) A composite material according to claim [[1]]4, wherein the cores are formed of PCD and the matrix of PeBN type material one of the first or second set of particles comprises polycrystalline diamond while another of the first or second set of particles comprises polycrystalline cubic boron nitride.

11. (Cancelled)

12. (Currently Amended) A composite material according to claim 1, wherein the cores and matrix ~~first set and second set of particles~~ are each made from mixtures of two types of polycrystalline ultrahard materials, wherein said mixtures are different from each other.

13. (Previously Presented) A method of producing a composite material as defined in claim 1, which includes the steps of:

- (i) providing a plurality of cores of said polycrystalline ultra-hard material or components for making a polycrystalline ultra-hard material;
- (ii) providing components for making a polycrystalline ultra-hard material of a different grade than that of the cores and a binder; and
- (iii) consolidating the cores and components to produce said composite material.

14.-21. (Cancelled)

22. (New) A composite material comprising an assemblage of ultrahard core-shell grains fused together throughout the composite material, wherein the core-shell grains have a core-shell structure in which the core is comprised of a first set of particles of a polycrystalline ultrahard material and the shell is comprised of a second set of particles of a polycrystalline ultrahard material different in particle size or composition from the first set of particles, and said grains are fused together throughout the composite material by having the shells of said grains directly bonded together throughout the composite material.

23. (New) A composite material according to claim 22, wherein one of the core or shell particles are comprised of polycrystalline diamond while another of the core or shell particles are comprised of polycrystalline cubic boron nitride.

24. (New) A composite material according to claim 22, wherein one of the core or shell particles have a finer particle size than another of the core or shell particles.

25. (New) A composite material according to claim 22, wherein one of the core or shell particles have a composition different than another of the core or shell particles.

26. (New) A composite material according to claim 24, wherein the fine-grained particles have a size in the range of about 0.1 to about 20 microns.

27. (New) A composite material according to claim 24, wherein the coarser particles have a size in the range of about 10 to about 100 microns.

28. (New) A composite material according to claim 22, wherein the core and shell particles are made of the same type of polycrystalline ultrahard material, and the particle size of the core particles differs from that of the shell particles by about 5 to about 70 microns.

29. (New) A composite material according to claim 24, wherein one of the core or shell particles are comprised of polycrystalline diamond while another of the core or shell particles are comprised of polycrystalline cubic boron nitride.

30. (New) A composite material according to claim 22, wherein the core and shell particles are each made from mixtures of two types of polycrystalline ultrahard materials, wherein said mixtures are different from each other.